In the Claims:

This listing of claims will replace all prior versions and listings, of claims in the application:

1. (original) A bumper system for a vehicle comprising:

a beam adapted for attachment to a vehicle;

an energy absorber engaging a face of the beam; the energy absorber having a top horizontal section defined by a top wall and an upper-mid wall connected by an upper-front wall, and having a bottom horizontal section defined by a bottom wall and a lower-mid wall connected by a lower-front wall, and further having a middle horizontal section defined by a mid-front wall connecting the upper-mid wall and the lower-mid wall, the top and bottom horizontal sections including top and bottom front nose portions that extend forward of the mid-front wall and that define a horizontal channel therebetween in front of the mid-front wall;

the front nose portions being configured to provide a first level of energy absorption during an initial impact stroke that collapses one or both of the front nose portions, and the top, middle, and bottom horizontal sections providing a higher second level of energy absorption during a continuing impact stroke that collapses the energy absorber against the face of the beam; and

a fascia covering the energy absorber and the beam;

whereby, during an initial front impact stroke, the top and bottom front nose portions provide a relatively low-energy absorption that "catches" an impacted object such as a knee of a human being, and then during a further continuing impact stroke, the top, middle, and bottom horizontal sections crush to provide an increased energy absorption.

2. (original) The bumper system defined in claim 1, wherein the top and bottom walls define wavy and undulating surfaces.

3. (original) The bumper system defined in claim 1, wherein the beam comprises an open channel having a height-to-depth ratio of at least 3:1.

4. (original) The bumper system defined in claim 1, wherein the beam is rollformed.

5. (original) The bumper system defined in claim 1, wherein the beam face defines a longitudinal forwardly-facing recess, and wherein the energy absorber includes a rearwardly-extending protruding ridge that extends into the forwardly-facing recess.

6. (original) The bumper system defined in claim 5, wherein the middle horizontal section of the energy absorber includes the rearwardly-extending protruding ridge.

7. (original) The bumper system defined in claim 1, wherein the top and bottom nose portions are semi-rigid but collapsible with a parallelogram motion that shifts one or both of the top and bottom front walls vertically, such that horizontal impact forces are converted at least in part to a vertical force upon receiving a horizontal frontal impact.

8. (original) The bumper system defined in claim 7, wherein the top nose portion collapses with a parallelogram motion that shifts the upper-front wall upward during an impact.

9. (original) A bumper system for a vehicle comprising:

a beam adapted for attachment to a vehicle and having a longitudinal curvature that, when viewed from above in a vehicle-mounted position, is shaped to match an aerodynamic curvilinear shape of a front of the vehicle;

an energy absorber engaging a face of the beam; the energy absorber having a top horizontal section defined by a top wall and an upper-mid wall connected by an upper-front wall, and having a bottom horizontal section defined by a bottom wall and a lower-mid wall connected by a lower-front wall, the top and bottom horizontal sections including top and bottom front nose portions that extend forwardly;

the top and bottom nose portions each being semi-rigid but collapsible with a parallelogram motion that shifts one or both of the top and bottom front walls vertically, such that horizontal impact forces are converted at least in part to a vertical force upon receiving a

horizontal frontal impact during an initial stroke of the frontal impact; and

whereby, during a first part of the frontal impact, the top and bottom front nose portions provide a relatively low-energy absorption that "catches" an impacted object such as a knee of a human being, and then during a further continuing impact stroke, the top and bottom horizontal sections crush to provide an increased energy absorption.

10. (original) The bumper system defined in claim 9, wherein the top and bottom walls are wavy.

11. (original) The bumper system defined in claim 9, wherein the beam comprises an open channel having a height-to-depth ratio of at least 3:1.

12. (original) The bumper system defined in claim 9, wherein the beam is rollformed.

13. (original) The bumper system defined in claim 9, wherein the beam face includes a longitudinal forwardly-facing recess, and the energy absorber includes a rearwardly-extending protruding ridge that extends into the forwardly-facing recess.

14. (original) The bumper system defined in claim 13, wherein the mid-horizontal section of the energy absorber includes the rearwardly-extending protruding ridge.

15. (original) A method comprising steps of:

constructing a bumper system including a stiff beam, and an energy absorber on a face of the beam, the energy absorber having top, middle, and bottom sections, with the top and bottom sections defining nose portions that extend forward of the middle section, the nose sections defining a space therebetween in front of the middle section, the top and bottom nose sections being constructed to deflect with a parallelogram motion upon impact; and

shifting at least one of the nose portions vertically with a parallelogram motion in response to an impact directed horizontally against a front of the bumper system, whereby

energy directed against a knee of an impacted person is converted into a throwing force that directs the person in a direction generally perpendicular to the line of impact and away from the vehicle bumper system.

16. (new) A bumper system for a vehicle comprising:

a bumper beam adapted for attachment to a vehicle; and

an energy absorber attached to a face of the bumper beam, the energy absorber including at least one section having parallel upper and lower walls that extend generally perpendicular to the face of the bumper beam and having a main front wall and an angled front wall connecting a front edge of the top and bottom walls, the main front wall and the angled front wall forming a non-uniform front surface that, upon a front impact against a pedestrian's knee, causes a structural collapse where the upper and lower walls flex with a parallelogram motion, the parallelogram motion redirecting and converting impact forces that are initially horizontal against the knee into upward vertical forces.

17. (new) The bumper system defined in claim 16, wherein the upper and lower walls each have a fore-to-aft horizontal length that is substantially longer than a height of the main front wall and angled front wall, thus assisting in the parallelogram motion.

18. (new) The bumper system defined in claim 16, wherein the at least one section includes at least an upper horizontal section and a lower horizontal section, each having a set of walls including the main front, angled front, upper and lower walls.

19. (new) The bumper system defined in claim 18, including stabilizing walls that extend between the lower wall of the upper horizontal section and the upper wall of the lower horizontal section, and wherein the upper and lower horizontal sections extend forward of the stabilizing walls to form upper and lower nose portions, respectively, with a forwardly facing channel therebetween.

20. (new) The bumper system defined in claim 19, including a fascia extending over and covering the beam and the energy absorber, the fascia including a section of material that extends between the upper and lower nose portions across the channel, the fascia cooperating with the nose portions during a front impact to facilitate and help cause the parallelogram motion.

21. (new) A bumper system for a vehicle comprising:

a bumper beam adapted for attachment to a vehicle; and

an energy absorber attached to a face of the bumper beam, the energy absorber including at least one section having parallel upper and lower walls that extend generally perpendicular to the face of the bumper beam and having a front wall;

the upper and lower walls being elongated and longer than the front wall and further the upper and lower walls and the front wall being joined to collapse with a parallelogram motion so that, upon a front impact against a pedestrian's knee and leg, the upper and lower walls flex with a parallelogram motion, the parallelogram motion redirecting and converting impact forces that are initially horizontal against the knee into vertical forces less damaging to the pedestrian's knee and leg.